In the Claims:

Claim 1 (currently amended): A reversible adhesive composition, comprising a mixture of:

~~a free radical polymerization initiator activated by actinic light~~

an alkoxylated acrylate; ~~and~~

a pharmaceutically acceptable filler[,]; and

~~wherein~~ a free radical polymerization initiator activatable by actinic light in an amount such that the reversible adhesive composition is ~~cured~~ curable by exposure to actinic light and when ~~the~~ cured ~~reversible adhesive composition loses~~ can lose its adhesive properties when exposed to ultrasonic waves/vibrations.

Claim 2 (original): A reversible adhesive composition according to claim 1, wherein the free radical polymerization initiator comprises a benzophenone, a substituted benzophenone, or a mixture thereof.

Claim 3 (original): A reversible adhesive composition according to claim 2, wherein the substituted benzophenone comprises one or more constituents selected from the group consisting of methyl, ethyl, and propyl groups, and combinations thereof.

Claim 4 (original): A reversible adhesive composition according to claim 2, wherein the substituted benzophenone is selected from the group consisting of 2,4,6-trimethylbenzophenone, 2,4-methylbenzophenone, 2,6-methylbenzophenone, 2-methylbenzophenone, 4-methylbenzophenone, and mixtures thereof.

Claim 5 (original): A reversible adhesive composition according to claim 4, wherein the mixture of benzophenones comprises about 70 to about 90 percent 2,4,6-trimethylbenzophenone and about 10 to about 30 percent of a benzophenone selected from the group consisting of 2-methylbenzophenone, 4-methylbenzophenone, and mixtures thereof.

Claim 6 (original): A reversible adhesive composition according to claim 1, wherein an alkoxy component of the alkoxylated acrylate is selected from the group consisting of methoxy, ethoxy, propoxy, and butoxy groups.

Claim 7 (original): A reversible adhesive composition according to claim 1, wherein the alkoxylated acrylate comprises an alkoxylated acrylate derivative comprising one or more constituents selected from the group consisting of linear or branched alkanes, alkenes, or alkynes; ethers; esters; acids; fats; sugars; and mixtures thereof.

Claim 8 (original): A reversible adhesive composition according to claim 1, wherein the pharmaceutically acceptable filler is selected from the group consisting of aluminum oxide; α-quartz powders; clay; talc; silica; diatomaceous earth; titanium dioxide; calcium carbonate; starches; sugars; and mixtures thereof.

Claim 9 (original): A reversible adhesive composition according to claim 8, wherein the pharmaceutically acceptable filler comprises a naturally occurring starch.

Claim 10 (original): A reversible adhesive composition according to claim 9, wherein the pharmaceutically acceptable filler is selected from the group consisting of corn starch, potato starch, wheat starch, and mixtures thereof.

Claim 11 (original): A reversible adhesive composition according to claim 8, wherein the pharmaceutically acceptable filler comprises corn starch.

Claim 12 (original): A reversible adhesive composition according to claim 1, wherein the mixture comprises:

about 0.5 to about 10 parts by weight of the free radical polymerization initiator;
about 0.5 to about 10 parts by weight of the alkoxylated acrylate; and
about 0.25 to about 20 parts by weight of the pharmaceutically acceptable filler.

Claim 13 (original): A reversible adhesive composition according to claim 1, wherein the mixture comprises:

about 1 part by weight of the free radical polymerization initiator;
about 1 part by weight of the alkoxylated acrylate; and
about 0.25 to about 1 part by weight of the pharmaceutically acceptable filler.

Claims 14-17 (cancelled)

Claim 18 (currently amended): A reversible adhesive composition according to claim 1, wherein the components of the mixture are ~~pre-mixed and~~ stored in a container impervious to actinic light.

Claim 19 (cancelled)

Claim 20 (currently amended): A reversible adhesive composition according to claim 1, wherein when cured by actinic light the ~~cured~~ reversible adhesive composition disintegrates upon exposure to ultrasonic waves/vibrations by carbon-oxygen bond breakage.

Claim 21 (currently amended): A method for reversibly bonding two surfaces together, comprising:

a) ~~forming~~ creating a reversible adhesive ~~mixture comprising~~ composition by mixing together

~~i) a free radical polymerization initiator activated by actinic light,~~

[ii)] i) an alkoxylated acrylate, ~~and~~

[iii)] ii)a pharmaceutically acceptable filler, and

iii) a free radical polymerization initiator activatable by actinic light in an amount such that the reversible adhesive composition is curable by exposure to actinic light and when cured can lose its adhesive properties when exposed to ultrasonic waves/vibrations;

b) applying the reversible adhesive composition to a first surface;

c) placing a second surface in contact with the reversible adhesive composition on the first surface;

d) curing the reversible adhesive composition by exposure to actinic light~~; and~~

~~e) optionally subsequently exposing the cured reversible adhesive mixture to ultrasonic waves/vibrations to cause the cured reversible adhesive composition to lose its adhesive properties and release the first and second surfaces~~.

Claim 22 (original): A method according to claim 21, wherein the first surface is a tooth surface and the second surface is the surface of a dental apparatus.

Claim 23 (original): A method according to claim 22, wherein the dental apparatus is selected from the group consisting of crowns, caps, braces, fillings, inlays, and veneers.

Claim 24 (original): A method according to claim 23, wherein the dental apparatus comprises a material selected from the group consisting of porcelain, gold, silver, metal composites, and metal alloys.

Claim 25-29 (cancelled)

Claim 30 (currently amended): A reversible dental adhesive composition, comprising a mixture of:

~~a) about 1 part by weight of a free radical polymerization initiator activated by actinic light comprising a mixture of about 77 to about 80 percent 2,4,6-trimethylbenzophenone and about 23 to about 20 percent of a benzophenone selected from the group consisting of 2-methylbenzophenone, 4-methylbenzophenone, and mixtures thereof;~~

[b)] a) about 1 part by weight of an methoxylated acrylate; ~~and~~

[c)] b) about 0.25 to about 1 part corn starch[,]; and

c) about 1 part by weight of a free radical polymerization initiator activatable by actinic light comprising a mixture of about 77 to about 80 percent 2,4,6-trimethylbenzophenone and about 23 to about 20 percent of a benzophenone selected from the group consisting of 2-methylbenzophenone, 4-methylbenzophenone, and mixtures thereof ~~wherein~~ such that the reversible dental adhesive composition is ~~cured~~ curable by exposure to actinic light and ~~the~~ when cured ~~reversible dental adhesive composition~~ disintegrates when exposed to ultrasonic waves/vibrations.

Claim 31 (new): A method according to claim 21, further comprising the step of exposing the cured reversible adhesive composition to ultrasonic waves/vibrations to cause the cured reversible adhesive composition to lose its adhesive properties and release the first and second surfaces.